



International Dairy Foods Association  
Milk Industry Foundation  
National Cheese Institute  
International Ice Cream Association

Linda Van Horn, PhD, RD, LD  
Chair, Dietary Guidelines Advisory Committee  
Via [www.dietaryguidelines.gov](http://www.dietaryguidelines.gov)

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Dear Dr. Van Horn and Dietary Guidelines Advisory Committee:

The International Dairy Foods Association appreciates the opportunity to comment on the 2010 Dietary Guidelines for Americans. The Dietary Guidelines can have an enormous impact on the daily food choices of Americans and the dairy industry was particularly proud and excited when the 2005 Guidelines named milk and milk products as a food group to encourage. We feel that recent nutrition science continues to support the inclusion of at least three servings of dairy foods per day and believe that this recommendation should be included in the 2010 Dietary Guidelines.

The International Dairy Foods Association (IDFA), Washington, DC, represents the nation's dairy manufacturing and marketing industries and their suppliers, with a membership of 530 companies representing a \$110-billion a year industry. IDFA is composed of three constituent organizations: the Milk Industry Foundation (MIF), the National Cheese Institute (NCI) and the International Ice Cream Association (IICA). IDFA's 220 dairy processing members run more than 600 plant operations, and range from large multi-national organizations to single-plant companies. Together they represent more than 85% of the milk, cultured products, cheese and frozen desserts produced and marketed in the United States. IDFA can be found online at [www.idfa.org](http://www.idfa.org).

IDFA recognizes the important and time-consuming task that is before the committee. In these comments, we have provided our thoughts on the Dietary Guidelines for Americans (DGA) and the role of dairy products in the 2010 DGAs.

### **Guidelines Should Encourage Nutrient Dense Foods, Such As Dairy Products**

Nutrient density was an important concept in the 2005 Dietary Guidelines for Americans. The report of the advisory committee recommended that Americans should make more nutrient dense choices.<sup>1</sup> The report defined nutrient dense foods as "those that provide substantial amounts of vitamins and minerals and relatively fewer calories." The Nutrient

Rich Foods Coalition defines nutrient dense foods as "foods [that] provide substantial amounts of vitamins, minerals and other nutrients, and relatively few calories."<sup>2</sup>

Using either definition, dairy foods are a nutrient dense choice, with milk as a good source, providing at least 10% of the Daily Value, of calcium, protein, potassium, phosphorous, riboflavin, niacin, vitamin A, vitamin D and vitamin B12. Milk and dairy products also make a significant nutrient contribution to the total American diet. Milk and other dairy foods are a major source of the following nutrients consumed by Americans: calcium, vitamin D, phosphorus, riboflavin, vitamin B12, protein, potassium, zinc, magnesium and vitamin A.<sup>1</sup>

We believe that nutrient density is an important concept to again encourage in the 2010 Guidelines because a single nutrient dense food choice can provide a variety of nutrients that are essential for health. This allows more nutrients to be provided in a lower calorie diet. This aids not only in increasing consumption of beneficial nutrients, but also assists in energy balance and therefore, weight control.

The retail cost of nutrient-rich foods may be high compared to other, less nutritious options, but the value of nutrient per dollar is excellent. According to the Bureau of Labor Statistics, the average cost of a gallon of milk was \$3.68 in December 2008.<sup>3</sup> Per serving, this is 23 cents to provide 30% DV calcium, 10% DV vitamin A, 25% DV vitamin D, 11% DV of potassium and many other nutrients. Milk is one of the least expensive food sources of calcium. Based on cost and absorbability, calcium fortified soy products were more than three times the cost of milk.<sup>4</sup>

### **"Food Groups to Encourage" Should Include Dairy Products, Fruits, Vegetables, and Whole Grains**

In the 2005 Dietary Guidelines, certain foods (dairy, fruits, vegetables and whole grains) were identified as "food groups to encourage" because Americans don't consume the recommended amounts. Additionally, these are nutrient-dense products which provide a number of essential nutrients. Based on recent research, these foods should continue to be highlighted for increased consumption.

These foods continue to be under consumed by most Americans. In the fall of 2008, the Healthy Eating Index (HEI) was updated to reflect the recommendations of the 2005 Dietary Guidelines for Americans. In a study that evaluated the new HEI-2005, the diets of smokers and non-smokers were evaluated and compared. For adult non-smokers, who tend to have better diets than smokers, the HEI-2005 scores were: 4.9 out of 10 for milk, 2.4 out of 5 for fruit, 3.1 out of 5 for vegetables and 1.1 out of 5 for whole grain. Although the intention of this study was not to prove food groups that are consistently lacking in the American diet, this does show that the intakes of these foods are still far below the ideal intake.<sup>5</sup>

The overall impact of low intake of these foods is the resultant decrease in essential nutrients provided by these food groups. These foods provide many of the nutrients that

are most at risk of being consumed in low levels by Americans. The shortfall nutrients for adults identified at the first meeting of the 2010 Dietary Guidelines Advisory Committee were calcium, potassium, fiber, magnesium, and vitamins A, C, and E.<sup>6</sup> Milk is a good source of calcium, potassium and vitamin A, while the other nutrients can be found at significant levels in fruits, vegetables and whole grains. Similarly, the first meeting of the Advisory Committee identified shortfall nutrients for children: calcium, potassium, fiber, magnesium and vitamin E, with vitamins A, C and phosphorous as potential shortfall nutrients for school age children.<sup>6</sup> Again, all these nutrients are provided by dairy foods or one of the other "food groups to encourage."

### **Dairy Consumption is Associated with Numerous Health Benefits**

The association between dairy intake and healthy bones or prevention of osteoporosis is well known. However, just as dairy products provide more than just calcium, there are also other health benefits of increased dairy consumption. There are FDA-approved health claims for dairy products or their components including calcium and vitamin D and osteoporosis<sup>7</sup>, and potassium and the risk of high blood pressure and stroke.<sup>8</sup> Additionally, many milk processors use truthful structure-function claims to discuss the positive health effects on the normal structure or function of the human body, such as calcium and bone health, vitamin D and calcium absorption, protein and strong muscles, and vitamin A and normal vision.

Obesity continues to be one of the most pressing nutrition issues in the United States, for both adults and children. Most observational studies indicate an inverse relationship between dairy or calcium intake and body weight and body fat loss.<sup>9,10,11,12,13,14,15,16,17,18,19,20,21</sup> Randomized clinical trials support the notion that diets consisting of three servings per day of dairy foods markedly enhance body weight and body fat loss during energy restriction in overweight and obese adults.<sup>22,23,24,25</sup>

Hypertension is a major public health concern in the United States, particularly for certain populations, such as older adults and African-Americans. Scientific evidence indicates that calcium or dairy foods have a beneficial effect on blood pressure.<sup>26,27,28,29</sup> The blood pressure-lowering effect of dairy products is best exemplified by the Dietary Approaches to Stop Hypertension (DASH) clinical trial. This study demonstrated that a low-fat dietary pattern high in fruits and vegetables (8-9 servings/d) and dairy products (~3 servings/d) produced greater reductions in blood pressure than either a diet high in only fruits and vegetables or the control diet.

Similar to obesity and hypertension, Insulin Resistance Syndrome and Type II Diabetes Mellitus is an important and growing public health concern. The available evidence indicates a consistent inverse association between dairy intake and the prevalence and incidence of Insulin Resistance Syndrome and Type II diabetes.<sup>30,31,32,33,34,35,36</sup>

### **Independent Health Organizations Recommend at Least Three Servings of Dairy**

In addition to the 2005 Dietary Guidelines, numerous health organizations recommend at least three servings of dairy products per day: the American Heart Association (AHA),<sup>37</sup> the American Academy of Pediatrics (AAP),<sup>38</sup> and the National Medical Association (NMA). The AAP recommends three servings of dairy products for children between four and eight years of age and four servings for older children.

The National Medical Association, the nation's oldest and largest organization representing African American physicians in the United States, recommends at least three servings of low-fat milk, cheese, or yogurt daily for African Americans to reduce the risk of certain chronic diseases and conditions such as osteoporosis, hypertension, some cancers and obesity.<sup>39</sup>

### **Lactose-free Dairy Products Are the Best Alternative for Lactose Intolerant Individuals**

Dairy foods provide a unique and diverse nutrient package. Many other substitutes do not provide the same nutrients or with the same bioavailability as dairy products. For people who are lactose intolerant, reduced lactose or lactose free products would be the best option since they will contribute the same nutrients as regular dairy products.

USDA's Food and Nutrition Service has already recognized the benefits of reduced lactose dairy products. In the final rule regarding milk substitutes for use in the National School Lunch Program and School Breakfast Program, USDA stated that "There is no need to offer a fortified milk substitute to a student whose medical or special dietary need is lactose intolerance."<sup>40</sup>

In addition to dairy products that are specially formulated to reduce lactose, there are also dairy products that are naturally low in lactose, particularly cheese and yogurt. According to the USDA National Nutrient Database for Standard Reference, Release 18, a one ounce serving of cheddar cheese contains 0.06 grams of lactose. Most lactose intolerant individuals can eat cheese without any discomfort. Cheese is an excellent way of providing the nutrition of dairy foods to people who may not regularly consume fluid milk products because of their lactose content. As indicated above, choosing low lactose dairy products is the preferred way to get the nutrition of dairy foods.

In the manufacture of yogurt, the cultures that ferment the milk and produce yogurt also consume the lactose that is naturally present in the milk. Through the very processing of yogurt, the lactose content in the finished product is reduced. Many individuals that are lactose intolerant can consume yogurt without discomfort. Since yogurt is a naturally low lactose dairy food that provides many of the same nutrients as milk, this is often a preferable choice for consumers that want to avoid lactose.

### **Discretionary Sugar and Fat Could Increase Consumption of Nutrient Dense Foods**

In the report of the 2005 Dietary Guidelines Advisory Committee, the committee advised that added sugars could be appropriate when added to nutrient dense foods, such as dairy

foods and beverages and presweetened cereals to increase palatability and consumption of those foods and make a positive impact on overall diet quality.<sup>1</sup> The concept of discretionary calories would best be used as added sugars or additional fats that assist in increasing consumption of nutrient dense foods and the entire package of nutrients that those foods supply.

Small, manageable changes that move an individual toward better food choices and a better overall diet are often the best way for people to make lasting changes in their eating plans. A nutrient dense product with additional sugars or fats, such as fruit flavored yogurt or lowfat milk, can assist people in incorporating more dairy products into their diet and along with those dairy foods, the calcium, vitamin D, potassium and other nutrients that the food contains.

One food that demonstrates the nutritional benefits of adding sugars to nutrient-dense foods is flavored milk. The main difference between flavored and unflavored milk are the added sugars, which adds about 60 to 70 calories per 8-ounce serving. A clinical report from the American Academy of Pediatrics suggests flavored milks (reduced fat or fat-free) with modest amounts of added sweeteners are “generally recommended” to help optimize the bone health and calcium intakes of children and adolescents.<sup>10</sup>

Research indicates that children who consume flavored milk tend to drink more milk and have higher calcium intakes than those who do not consume flavored milk.<sup>41,42</sup> Considering that most children are not meeting current calcium recommendations, flavored milk is an effective strategy to help children get the calcium their growing bodies need. Researchers at the University of Vermont evaluated data from the USDA Continuing Survey of Food Intakes of Individuals (CSFII) to determine the nutritional consequences of flavored milk consumption among 3,888 U.S. children ages 5 to 17.<sup>14</sup> Children who drank flavored milk drank more milk and got more calcium, without increasing their total fat and added sugars intake. The flavored milk drinkers also consumed fewer nutrient-poor soft drinks and fruit drinks than children who did not drink flavored milk. The study indicates that allowing children to choose flavored milk adds to their nutrient intake without increasing overall added sugars and total fat.

While the amount of added sugars in flavored milk can come from a person's discretionary calories for the day, most Americans do not have large numbers of discretionary calories available. For people who want to include flavored milk in their diets, but want to use fewer discretionary calories, many milk processors have been working to develop new, lower calorie products. In fact, 67% of processors have developed one or more flavored milks that are 150 calories or less per 8 ounce serving.<sup>43</sup> While the majority of these products will be targeted for schools, these same formulations could be used to make lower calorie flavored milk that all Americans can enjoy drinking.

In conclusion, IDFA urges the Dietary Guidelines Advisory Committee to make the following recommendations in the committee's report:

1. Recommend at least 3 servings of dairy products per day.

2. Encourage consumption of nutrient-dense foods, particularly dairy products, fruits, vegetables, and whole grains.
3. Encourage lactose-reduced dairy products as an alternative for those avoiding lactose.
4. Specifically allow for discretionary calories that can increase consumption of nutrient-dense foods, such as added sugars in flavored milk or yogurt.

IDFA again thanks the committee for their hard work and dedication to increasing the nutrition status of Americans. If there is any information that IDFA can provide, please feel free to call on us.

Sincerely,



Connie Tipton  
President and CEO



Michelle Albee Matto, MPH, RD  
Assistant Director, Nutrition and Labeling

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<sup>1</sup> Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2005.

<sup>2</sup> [http://www.nutrientrichfoods.org/for\\_health\\_professionals/defining\\_nutrient\\_dense\\_foods.html](http://www.nutrientrichfoods.org/for_health_professionals/defining_nutrient_dense_foods.html), accessed January 22, 2009

<sup>3</sup> [http://data.bls.gov/PDQ/servlet/SurveyOutputServlet;jsessionid=f030268c031c\\$3Fx\\$3F\\$](http://data.bls.gov/PDQ/servlet/SurveyOutputServlet;jsessionid=f030268c031c$3Fx$3F$), accessed January 23, 2009

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<sup>6</sup> Meeting Minutes, Dietary Guidelines Advisory Committee Meeting, October 30-31, 2008

<sup>7</sup> 21 Code of Federal Regulations 101.72

<sup>8</sup> Notification for a Health Claim Based on an Authoritative Statement for Potassium Containing Foods, Tropicana Products, July 3, 2000 and Letter from Carol Adler to Nancy Green, October 26, 2000.

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